



Nathaniel Altfeather  
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*-Nathaniel Altfeather*

## Making a Difference... Worldwide

Although Nathaniel Altfeather had always been interested in biology and physics, when it came to choosing a major in college, he just couldn't make up his mind. Then, at a CALS majors workshop, he discovered Biological Systems Engineering (BSE), a major that ties together many aspects of both disciplines. After receiving his bachelor's degree, Altfeather continued on for a master's, and then during his final year landed a job at Science Applications International Corporation, a company that helps both government agencies and private corporations integrate new technologies into their systems. Now, as an energy engineer at SAIC, Altfeather works on the State of Wisconsin's Focus on Energy program, where he approves funding for industrial energy efficiency projects.

Altfeather spends the majority of his time in the office reviewing grant applications for projects at industrial facilities around Wisconsin. When reviewing each application, he considers the broader value and impact that each proposal would have on the environment and community. He also spends time assessing the potential economic impact of each project, and reviews them for engineering accuracy. Altfeather spends about five percent of his time outside of the office, meeting with customers and performing “walk-throughs” at their businesses. During these on-site visits, Altfeather looks for even more ways to conserve energy.

“Technical skills and interpersonal skills are extremely important in my position,” says Altfeather. “I must be confident in my abilities and be able to go back to my peers with questions and concerns regarding their work.”

He notes that being able to work as part of a team is also critical, as he spends a great deal of time discussing the merits of different projects with his colleagues and his manager. Overall, Altfeather credits his confidence, tact, and good communication skills for his success.

Altfeather also points out that energy is a very critical field at the moment, affecting every aspect of our world, from politics to world hunger. One of the future's most promising energy solutions, says Altfeather, lies in extracting energy from biological materials, an area in which the UW- Madison's BSE department is terrifically positioned to lead due to the department's ability to integrate biological and agricultural knowledge with engineering skills.

Altfeather encourages students to get involved in extracurricular activities within the BSE department.

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